In the new world of personal computers there is just one that is known as the best: the PET computer

The PET™ home computer by Commodore is a creature of many faces, only a few of which you will see on the next page.

As many faces as you see, the PET has even more. Its applications are limited only by the user's needs.

The future of the PET is virtually unlimited; its present capabilities are already many and impressive.

As a personal computer, the PET can teach languages and mathematics; play games; create graphic designs; answer the telephone, log calls, and dial numbers; store meal recipes and change number of portions; maintain budgets, personal records and checkbooks; operate appliances and temperature controls.

Note: while the PET indeed has all these capabilities, some are not yet here: the phone capabilities will not become a reality until the modem hardware is completed. But that should be before the year is over.

As a management tool, it delivers the information the executive needs, in the form he can use, and available to him alone. Trend analyses charts and graphs can be almost instantly available.

The professional may use the PET for maintaining appointment schedules, recording income and expenditures and filing all the specialized information and forms he may need to make his work more efficient—from medical records for a doctor to income tax computations for an accountant.

The engineer, mathematician, physicist has a tool far superior to the very best programmable calculators yet developed . . . at a cost that is comparable . . . and with almost infinitely greater versatility.

And the businessman has a computer that can maintain inventories, keep payroll records, operate accounts payable and receivable, issue checks, handle correspondence.

Again, some of these capabilities will involve hardware not yet available, but which should be ready fairly soon.

The PET is a computer. But a very different computer from any you have ever seen before. The PET is a personal computer; it stands for Personal Electronic Transactor. It is very compact, measuring just 16.5" wide by 18.5" deep and 14" high, and quite portable; it can be carried and used anywhere. It operates on ordinary current available in any office, home or factory.

The PET has a television screen, a keyboard as simple to use as a typewriter and a self-contained cassette recorder which is the source for programs and for storing data in connection with these programs. And it has, in its standard configuration, an 8K user memory. (This is in addition to the 14K operating system resident in the computer.)

Although the PET is built to the highest standard in the industry, it may perhaps require service in its lifetime. You'll find the PET surprisingly easy to service. Modular components, standard TV circuitry and a basic cassette assure that a TV serviceman with PET product knowledge will be able to render satisfactory service. Moreover, the self-diagnosing computer board will tell the serviceman if it needs replacement. And Commodore will ultimately maintain a network of Authorized Dealer service centers as well as its own service points.

Because the PET is a personal computer, it uses BASIC language, the easiest to learn and simplest to program. So simple that many people without prior computer knowledge will find it surprisingly easy to begin rudimentary programming after only a few hours and, with diligent application, could become quite facile. Because of the widespread use of BASIC, a large number of programs are already available from various sources, including PET user clubs springing up in many places.

There is direct access to the machine language resident in the ROM through the keyboard so that—as one example—a particular POKE command will convert 26 graphic characters to lower case letters.

The Commodore PET. So simple to learn and to use. Yet the PET can also boast of advanced screen editing—allowing complete and instant insertion, deletion, substitution of characters and full cursor movement.

This is at the heart of the PET: It is a wonderfully simple device to master; really as easy to use as an advanced calculator. Yet it has the power and versatility of the most advanced computers.

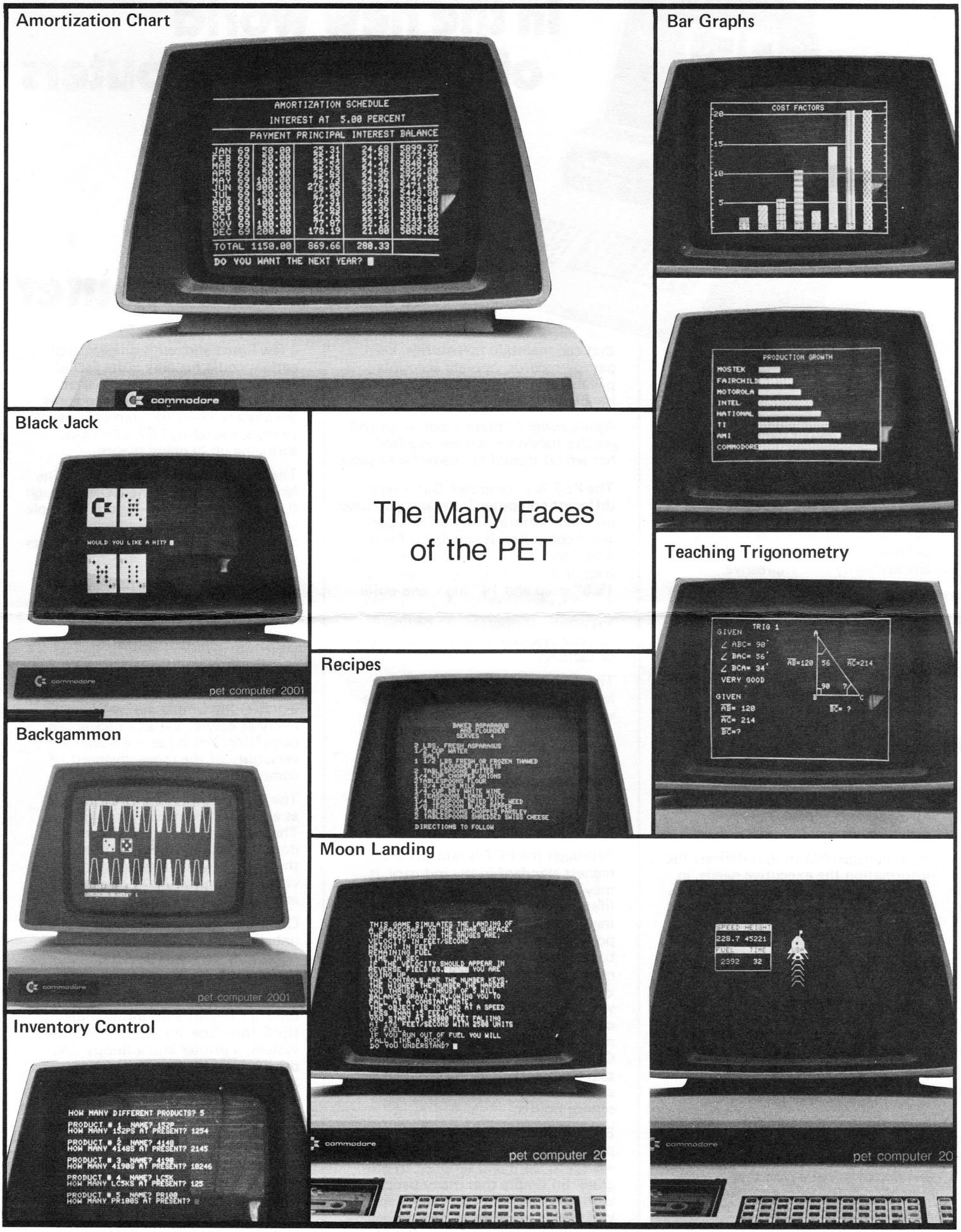
The PET is surprisingly inexpensive, as a personal computer should be. The PET is a product of Commodore, a company that has developed through the years a reputation for value and innovation in calculators and electronic watches.

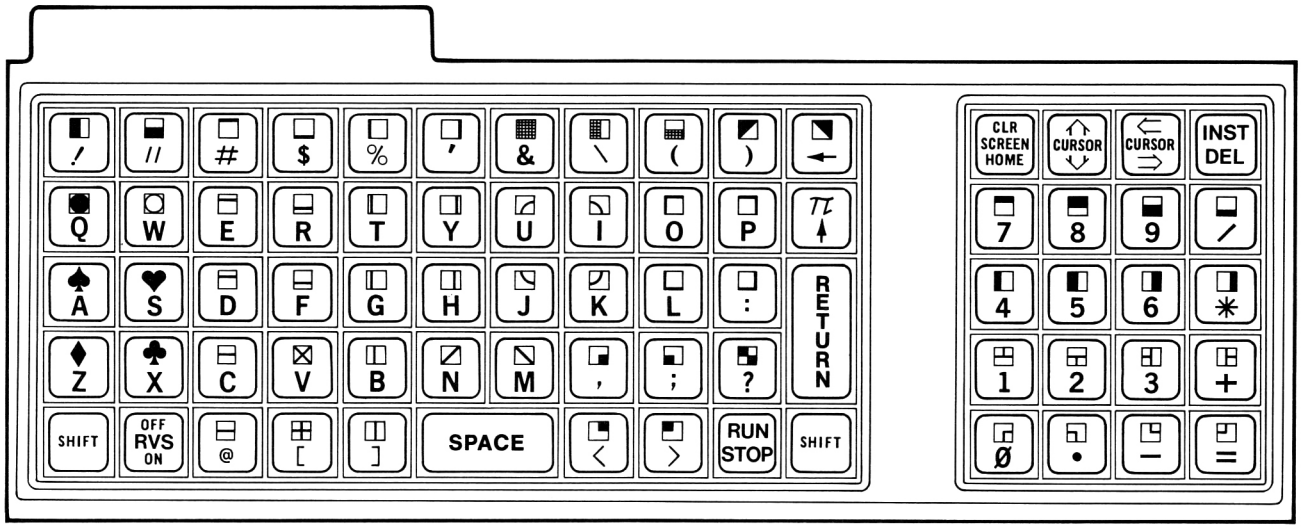
Quite portable, very affordable and unbelievably versatile, the PET computer may very will be a lifetime investment.

Additional programs, additional memory boards and, through the IEEE Interface, a telephone interface system, a printer and a floppy disc drive are among the components that are being developed for those users who may perceive a need.

A second cassette is already available through a built-in interface.

An extra 8 bit user-controllable port is also built-in for "do-it-yourself" attachments . . . such as a music synthesizer, speakers, a light controller . . . for fun and games.


Amortization Chart
AMORTIZATION SCHEDULE
INTEREST AT 5.00 PERCENT
PAYMENT PRINCIPAL INTEREST BALANCE
JAN 69 50.00 25.31 24.68 $899.37
FEB 69 50.00 25.44 24.56 $873.93
MAR 69 50.00 25.57 24.43 $848.36
APR 69 50.00 25.70 24.30 $822.66
MAY 69 50.00 25.83 24.17 $796.83
JUN 69 100.00 27.96 23.04 $768.87
JUL 69 50.00 27.09 22.91 $741.78
AUG 69 100.00 27.31 22.69 $714.47
SEP 69 50.00 27.43 22.57 $687.04
OCT 69 50.00 27.57 22.43 $659.47
NOV 69 100.00 27.97 22.03 $631.50
DEC 69 200.00 29.19 21.00 $602.31
TOTAL 1150.00 869.66 280.33
DO YOU WANT THE NEXT YEAR?
commodore
Bar Graphs
COST FACTORS
20
15
10
5
PRODUCTION GROWTH
MOSTEK
FAIRCHILD
MOTOROLA
INTEL
NATIONAL
TI
AMI
COMMODORE
Black Jack
WOULD YOU LIKE A HIT?
commodore
pet computer 2001
The Many Faces of the PET
Recipes
BAKED ASPARAGUS
AND FLOUNDER
SERVES 4
2 LBS. FRESH ASPARAGUS
1/2 CUP WATER
SALT
1 1/2 LBS FRESH OR FROZEN THAWED
FLOUNDER FILETS
2 TABLESPOONS BUTTER
1/4 CUP CHOPPED ONIONS
2 TABLESPOONS FLOUR
1 3/4 CUPS MILK
1/4 CUP DRY WHITE WINE
2 TEASPOONS LEMON JUICE
1/4 TEASPOON RUBBED SAGE LEAF
1/8 TEASPOON BLACK PEPPER
2 TABLESPOONS CHOPPED PARSLEY
2 TABLESPOONS SHREDDED SWISS CHEESE
DIRECTIONS TO FOLLOW
Teaching Trigonometry
TRIG 1
GIVEN
∠ ABC= 90°
∠ BAC= 56°
∠ BCA= 34°
VERY GOOD
GIVEN
AB= 120
AC= 214
BC=?
AB=120
56
AC=214
90
?
BC= ?
Backgammon
commodore
pet computer 2001
Moon Landing
THIS GAME SIMULATES THE LANDING OF
A SPACECRAFT ON THE LUNAR SURFACE.
THE READINGS ON THE GAUGES ARE;
VELOCITY IN FEET/SECOND
HEIGHT IN FEET
REMAINING FUEL
TIME IN SEC.
IF THE VELOCITY SHOULD APPEAR IN
SCIENTIFIC FIELD E0. YOU ARE
GOING OK.
THE CONTROLS ARE THE NUMBER KEYS
FOR HIGHER THRUSTER, LOWER THRUSTER
AND THRUST 0 THRUST FOR NIL.
BALANCE SHOULD ANYTHING YOU TO
FALL AT A CONSTANT RATE.
THE OBJECT IS TO LAND AT A SPEED
LESS THAN 15 FEET/SEC.
YOU START AT 45000 FEET FALLING
AT 220 FEET/SECOND WITH 2500 UNITS
OF FUEL.
IF YOU RUN OUT OF FUEL YOU WILL
FALL LIKE A ROCK.
DO YOU UNDERSTAND?
commodore
pet computer 20
SPEED HEIGHT
228.7 45221
FUEL TIME
2392 32
commodore
pet computer 20
Inventory Control
HOW MANY DIFFERENT PRODUCTS? 5
PRODUCT # 1 NAME? 152P
HOW MANY 152PS AT PRESENT? 1254
PRODUCT # 2 NAME? 4148
HOW MANY 4148S AT PRESENT? 2145
PRODUCT # 3 NAME? 4198
HOW MANY 4198S AT PRESENT? 18246
PRODUCT # 4 NAME? LC5K
HOW MANY LC5KS AT PRESENT? 125
PRODUCT # 5 NAME? PR108
HOW MANY PR108S AT PRESENT?



the PET keyboard

The PET keyboard consists of 73 keys. There are the usual alphanumerics (A-Z and 0-9) found on typewriters and calculators and many computers.

But the PET has something more: 64 graphic characters. The graphics can be used for plots, for fun and games, or for artwork.

There are also special screen and keyboard control keys which allow the moving of the cursor in four directions, the reversing of characters and background, the inserting and deleting of characters. Shift keys and a run/stop key are also provided to facilitate keyboard operations.

specifications

Dimensions: 16½" wide by 18½" deep. 14" overall height
Weight: 44 lbs

MEMORY

Random Access Memory (user memory): 4K (or 8K optional) are internal, expandable to 32K bytes of which 24 (or 28) are external

Read Only Memory (operating system resident in the computer): 14K bytes

8K—BASIC interpreter
4K—Operating system
1K—Diagnostic routine
1K—Machine language monitor

VIDEO DISPLAY UNIT

9" enclosed, black and white, high-resolution CRT

1000 character display, arranged 40 columns by 25 lines

8 x 8 dot matrix for characters and continuous graphics

Automatic scrolling from bottom of screen

Winking cursor with full motion control

Reverse field on all characters (white on black or black on white)

64 standard ASCII characters; 64 graphic characters

KEYBOARD

9½" wide x 3" deep; 73 keys

All 64 ASCII characters available without shift. Calculator style numeric key pad

All 64 graphic and reverse field characters accessible from keyboard (with shift)

Screen Control: Clear and erase
Editing: Character insertion and deletion

CASSETTE STORAGE

Fast Commodore designed redundant-recording scheme, assuring reliable data recovery

Cassette drive modified by Commodore for much higher reliability of recording and record retention

High noise immunity, error detection, and correction

Uses standard audio cassette tapes

Tape files, named

OPERATING SYSTEM

Supports multiple languages (BASIC resident)

Machine language accessibility

File management in operating system

Cursor control, reverse field, and graphics under simple BASIC control

Cassette file management from BASIC

True random number generation or pseudo random sequence

INPUT/OUTPUT

All other I/O supported through IEEE-488 instrument interface which allows for multiple intelligent peripherals

All I/O automatically managed by operating system software

Single character I/O with GET command

Easy screen line-edit capability

Flexible I/O structure allows for BASIC expansion with intelligent peripherals

BASIC INTERPRETER

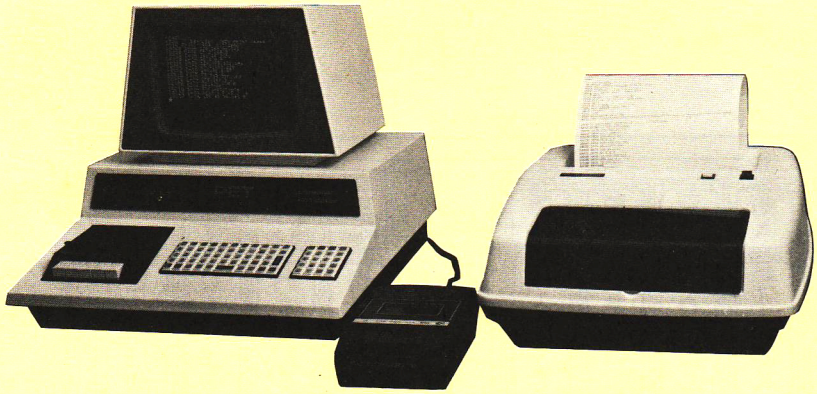
Expanded 8K BASIC; 20% faster than most other 8K BASICS

Upward expansion from current popular BASIC language

Strings, integers and multiple dimension arrays

10 significant digits; floating point numbers

Direct memory access through PEEK and POKE commands



PET and Peripherals. The external cassette (the PET CASSET™ model C2N) is shown connected to the cassette port and ready for file management.

Also shown is the PET Printer, model 2020, capable of printing up to 80 characters per line on 8½" roll or fan-fold paper. It prints the entire complement of PET alphanumerics and graphics at approximately 120 CPS on a 7x8 dot matrix. The unit can be programmed to print extended characters as well as a unique character (such as a corporate logo).

commodore basic

The fastest full floating-point BASIC implemented on a micro-computer. Allows communication directly from BASIC to IEEE-488 standard devices, cassettes, display, and keyboard built into PET. Accurate built-in clock is settable and readable from BASIC in decimal or string value. Full command set, including:

Standard Dartmouth BASIC Statements*

LET READ PRINT DATA IF
THEN FOR NEXT DIM END
GOTO

Extended BASIC Statements

RESTORE REM GET GOSUB DEF
RETURN STOP STEP INPUT FN
ON . . . GOTO ON . . . GOSUB

Scientific Functions

SGN INT ABS SQR RND SIN
COS TAN ATN LOG EXP π

Logical Operators

AND OR NOT

Operation Commands

RUN NEW CLR LIST CONT FRE

Formatting Functions

TAB POS SPC

Machine Level Statements

PEEK POKE

Allow the user to examine and store at specific memory locations.

USR SYS

Link BASIC to machine language subroutines with parameter passing or developmental subsystems.

WAIT

Monitors status of a memory location such as an I/O port until specified bits are set.

String Functions

LEFT$ RIGHT$ MID$

Returns substrings (of specified length and position) of string acted upon.

*Note: Arrays are currently limited to 255 elements.

CHR$ ASC

CHR$ returns a character, given a numeric code.
ASC returns a numeric code corresponding to a character.

LEN

Returns the length of a string.

VAL STR$

Convert decimal values to numeric strings and vice-versa.

Extended I/O Statements

OPEN CLOSE

Control association of a logical file number to a physical device and, optionally, a file name on the device.

SAVE LOAD VERIFY

Store and retrieve a program, with optional file name, on a physical device. Load allows for program overlay, VERIFY compares contents of memory to stored program.

PRINT# INPUT# GET#

Allow communication with logical device numbers other than keyboard or screen. GET# inputs one character.

CMD

Permits communication with multiple devices simultaneously.

Example of I/O Operations

Tape-to-tape file copy

```
10 OPEN 5,1,0, "OLD FILE"
20 OPEN 6,2,1, "NEW FILE"
30 INPUT#5,A$
40 IF ST AND 64 GO TO 70
50 PRINT#6,A$
60 GO TO 30
70 CLOSE 5
80 CLOSE 6
```

Program locates "OLD FILE" on tape #1, writes file header for "NEW FILE" on tape #2, then copies tape #1 to #2 until it encounters an EOF on #1, and then writes an EOF on #2.

Variables

TYPES: Real Integer (%) String ($)

NAMES: Variable names are uniquely given as a letter or a letter followed by a letter or a digit.

Special Variables

TI TI$ Time of day

ST Status word for I/O operations

commodore

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